telephony

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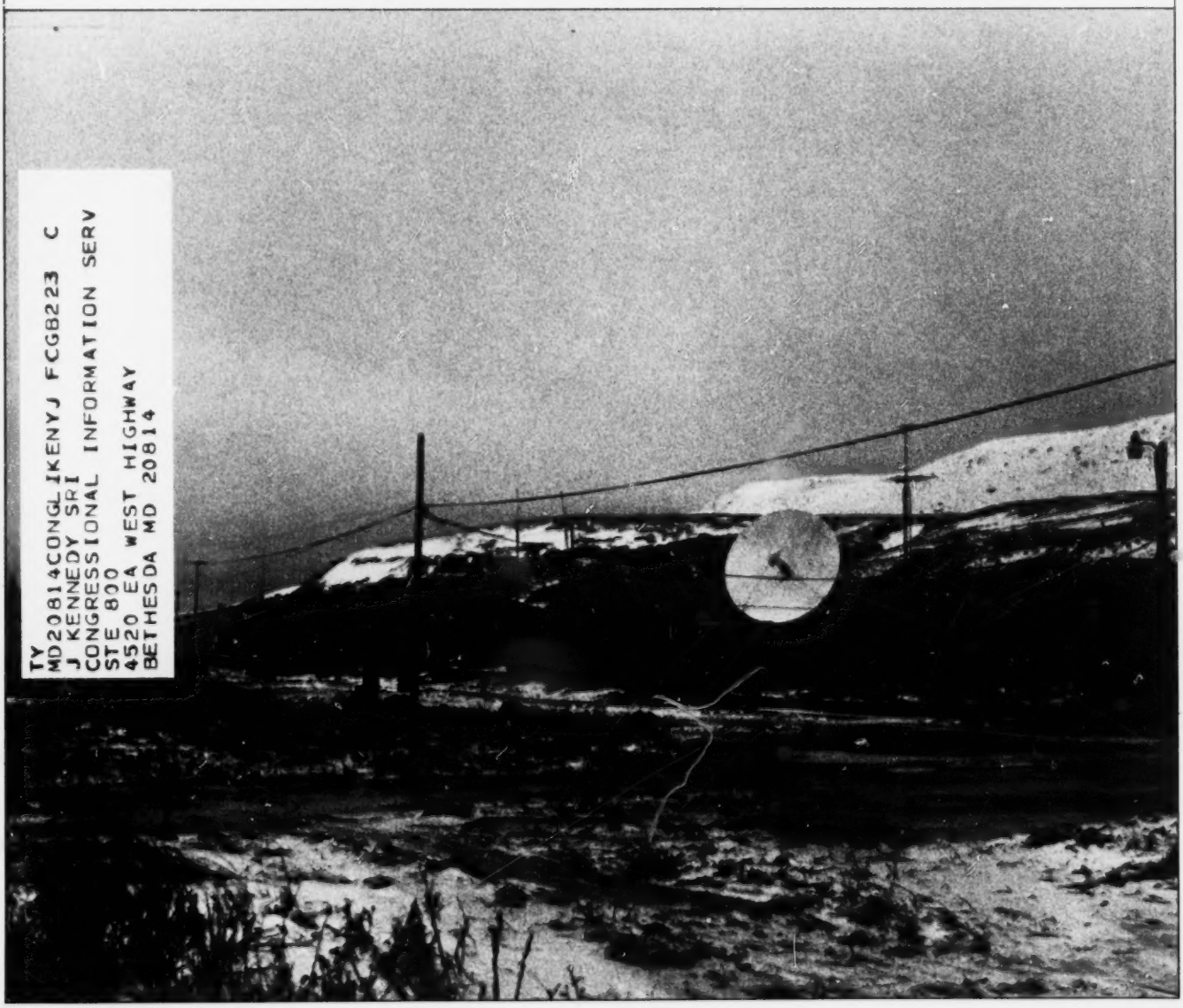

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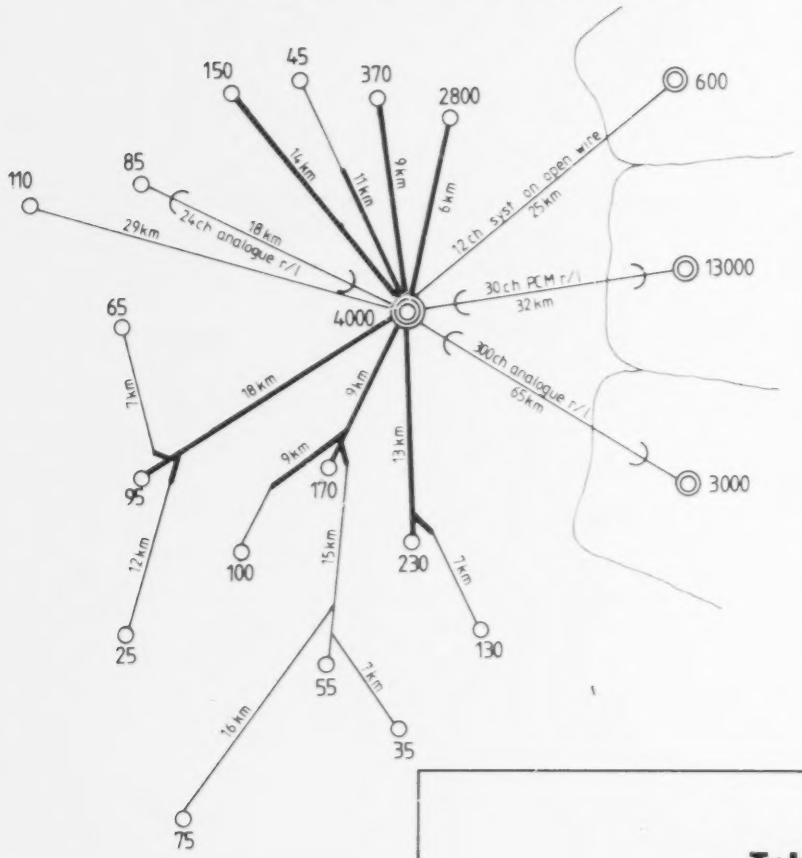
Telecommunications in rural Finland

Typical PTT Numbering Area (c. 14.000 subscribers)



○ 110 Local exchange and number of subscribers

◎ Group exchange and number of subscribers in exchange area

◎ 4000 Netgroup exchange and number of connections in subsriber stage

——— Open wire

━━━ Cable

⟷ Radio link

FINLAND is one of the most advanced countries in the world with respect to telephony. The telephone density was 52 telephones per 100 people in 1982, with a wide range of services and low tariffs. This shows that telecommunications can be managed effectively even though most exchanges are small (less than 500 numbers) and the junction and subscriber lines are long.

The average density of the population in Finland is 15.7 people per square kilometer; in some municipalities it is less than 2. Owing to the sparse population and the abundance of waterways the telecommunication networks consist of small exchanges, low capacity transmission systems and long junctions.

Despite the fragmentation of networks, the level of service is high, even in areas of very spare population, as is shown in Table 1 on this page.

To keep the level of service high and to maintain equal regional distribution the operating organization must have a good grasp of technology and skilled personnel. The Finnish PTT is a good example of such an organization. When operations are well managed, not even natural disasters can paralyze the network for long. □

Table 1
Characteristics of the telephone service (PTT's area, 1982)

Population density (population/sq. km)	Telephone density (phones/100 persons)	Mean delivery time of orders (weeks)	Mean fault repair time (hours)
Cities and towns 20.6	49.9	<2	<48
Rural areas 4.4	41.0	<2	<48

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